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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/530,196	08/22/2000	Nobuo Kimura	31981-160441	2129

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Venable
Post Office Box 34385
Washington, DC 20043-9998

EXAMINER

JOHNSON, EDWARD M

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/530,196

Applicant(s)

KIMURA ET AL.

Examiner

Edward M. Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18,21,22,24-39 and 41 is/are pending in the application.
- 4a) Of the above claim(s) 21 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18,24-39 and 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 18, 24-39, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO97/00134 (U.S. Pat. No. 6,228,480 referred to for translation).

Regarding claim 18, Kimura '480 discloses a photocatalyst-carrying structure comprising a photocatalyst film laminated (see column 15, lines 44-46 and column 37, lines 12-15; laminating involves heat and pressing) onto a metallic substrate (see column 4, lines 8-9); and coating by dipping, drying the adhesive layer (see Examples 67-71), adding a silane coupler (see column 7, lines 39-41) and laminating (see column 15, lines 44-46 and column 37, lines 12-15). Kimura '480 does not irradiate UV rays in UV-A range at a strength of 3 mW/cm² under an atmospheric temperature of 25 °C and relative humidity of 70%, the conditions upon which the recitation "capable of decomposing

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triolein at a rate of $5 \mu\text{g}/\text{cm}^2/\text{day}$ " is made contingent. Therefore, the claim is considered to be anticipated. Further, the recited physical properties appear to be inherent characteristics of the photocatalyst produced in the manner disclosed in Suzue '480, since it is produced with the same lamination step. See *In re Fitzgerald et al.*, supra.

Kimura fails to disclose 60-200°C.

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to conduct the laminating of Kimura at 60-200°C because Kimura '480 discloses the laminating "at a process for drying and winding at the drying zone" (see Example 73) and drying the coated substrate at 150°C or less as a method to carry an adhesive layer on the substrate (see column 6, lines 19-27).

Regarding claims 24-26, 35-39, Kimura '480 discloses a colored steel or aluminum plate (see column 13, lines 11-25), polyvinylchloride and polymethylmethacrylate resins (see column 14, lines 16-25).

Regarding claims 27, 31, and 34 Kimura '480 discloses 5 microns or less (see column 10, lines 57-63).

Regarding claim 28, Kimura '480 discloses a silane coupler (see column 7, lines 39-41).

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Regarding claim 29, Kimura '480 discloses 0.001-5% silicon compound in the solution (see column 8, lines 58-61) and 10-50% silicon-modified resin (see column 8 lines 1-3).

Regarding claim 30, Kimura '480 discloses 0.001-5% silicon compound in the solution (see column 8, lines 58-61) and methyl trimethoxysilane (see column 9, lines 16-18) as silicon compound, which is in an amount of 0.001 to 5% (see column 9, lines 26-30).

Regarding claim 32, Kimura '480 discloses 0.1-30% metal oxide sol (see column 9, lines 52-53) and titanium dioxide in an amount of 5% (see column 33, lines 28-30 and Table 6).

Regarding claim 33, Kimura '480 discloses silica sol acidified with nitric acid (see Examples 74-77) 2-60% silicon and 5-40% colloidal silica (see column 3, lines 35-38).

Regarding claim 41, it would have been obvious to one of ordinary skill in the art at the time the invention was made to laminate at an optimum pressure within 3-160 kg/cm³ because Kimura discloses laminating a 20 micron film, which would motivate an ordinary artisan to use an optimum pressure within the claimed range to reach the disclosed results of 20 microns and a sticking film.

Response to Arguments

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3. Applicant's arguments filed 8/19/05 have been fully considered but they are not persuasive.

The declaration under 37 CFR 1.132 filed 8/19/05 is insufficient to overcome the rejection based upon Kimura '480 as set forth in the last Office action because: the evidence is not commensurate in scope with the claims, since the claimed range goes down to 60 degrees, whereas Applicant only provides data from non-reheated and 100 degrees, but not 60 degrees. Further, no comparison is made against the prior art disclosure of 150°C or less.

It is argued that accordingly, it is obvious that this section in Kimura describes... via a sticker. This is not persuasive because the Examiner's position is that one skilled in the art would interpret the term "laminating" to inherently involve both heating and pressing in such a way as to not destroy the disclosed film or sticker, since that would destroy the disclosed invention of Kimura. And, in any case, at least some additional heat would be generated through at least friction by the winding and pressing disclosed in Kimura.

It is argued that the U.S. PTO Examiner's attention... Examples 86-88 of '480. This is not persuasive because those Examples were not relied upon by the Examiner.

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It is argued that moreover, Kimura does not describe the structural result... heat pressing at 60-200°C. This is not persuasive because a method is claimed in the elected invention and not a structure. It is noted that the features upon which applicant relies (i.e., the structure of Fig. 1) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the

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receptionist whose telephone number is 571-272-0987.

A handwritten signature in cursive script, appearing to read "Ed M. Johnson".

Edward M. Johnson
Primary Examiner
Art Unit 1754

EMJ

December 12, 2005